

ABSTRACT

The invention relates to an integrated circuit (210) for an on-wire communication system, comprising several communication connections (C) for connecting external electrical signal lines (L), wherein an input/output circuit (IO) for inputting and/or outputting communication signals from or to the signal lines (L) is associated with each communication connection (C); wherein one of several thyristors (TY) is associated with each communication connection (C) in order to reduce any overvoltage which occurs at the respective communication connection (C) by a current flow through this thyristor (TY); wherein a control electrode (G') of each thyristor (TY) is connected to a control circuit (CO) which detects a current flow through this thyristor (TY), and in the case of a detected current flow de-energises that input/output circuit (IO; O) which is associated with that communication connection (C; C, C') with which this thyristor (TY) is associated. The integrated circuit is thus protected against overvoltages occurring, and is affected in a comparatively minor way by overvoltages that do occur.